

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>NP0011</b>	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/EP 03/08698</b>	International filing date (day/month/year) <b>06/08/2003</b>	(Earliest) Priority Date (day/month/year) <b>29/08/2002</b>
Applicant  <b>NICOX S.A.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.  
☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established by this Authority to read as follows:

PROCESS FOR PREPARING NITROOXYDERIVATIVES OF NAPROXEN

5. With regard to the **abstract**,

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- ☐ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

☐ None of the figures.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/EP 03/08698

**Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)**

## INTERNATIONAL SEARCH REPORT

International Application No

T/EP 03/08698

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C201/02 C07C203/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BEILSTEIN Data, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 10814 A (NICOX SA ;CASTALDI GRAZIANO (IT); OLDANI ERMINIO (IT); BENEDINI FR) 15 February 2001 (2001-02-15) claims; examples 2-6 page 4, last line -page 5, line 4 ---	1-8
Y	KAWASHIMA ET AL: "Synthesis and Pharmacological Evaluation of (Nitrooxy)alkyl Apovincaminates" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 36, 1993, pages 815-819, XP002210204 ISSN: 0022-2623 page 815, scheme I, route A and B, page 817, right-hand column, lines 8-42 --- -/--	1-8

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

20 January 2004

Date of mailing of the international search report

17/02/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Seufert, G

## INTERNATIONAL SEARCH REPORT

International Application No

T/EP 03/08698

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	OGAWA T ET AL: "SYNTHESIS AND ANTIHYPERTENSIVE ACTIVITIES OF NEW 1,4-DIHYDROPYRIDINE DERIVATIVES CONTAINING NITROOXYALKYLESTER MOIETIES AT THE 3- AND 5-POSITIONS" CHEMICAL AND PHARMACEUTICAL BULLETIN, PHARMACEUTICAL SOCIETY OF JAPAN. TOKYO, JP, vol. 41, no. 6, June 1993 (1993-06), pages 1049-1054, XP001093850 ISSN: 0009-2363 page 1050, Chart 1, method C, page 1053, right-hand column, line 16 - page 1054, left-hand column, line 13 ---	1-8
Y	DATABASE WPI Section Ch, Week 199347 Derwent Publications Ltd., London, GB; Class B02, AN 1993-374590 XP002267384 & JP 05 279359 A (KAWAKEN FINE CHEM CO LTD), 26 October 1993 (1993-10-26) abstract ---	1-8
X	ABADI, ASHRAF H. ET AL: "Synthesis and cyclooxygenase inhibitory properties of novel (+) 2-(6-methoxy-2-naphthyl)propanoic acid (naproxen) derivatives" ARCHIV DER PHARMAZIE, vol. 334, no. 3, 2001, pages 104-106, XP002267383 page 105, scheme 1, reaction of 4 to 5 ---	1-8
X	C. GIORDANO ET AL.: "A Stereoconvergent Strategy for the Synthesis of Enantiomerically Pure (R)-(-) and (S)-(+)-2-(6-Methoxy-2-Naphthyl)-Propanoic Acid (Naproxen)" TETRAHEDRON, vol. 45, no. 13, 1989, pages 4243-52, XP001157233 cited in the application page 4244 scheme 1, page 4245, last paragraph before the table ---	9
A	WO 95 09831 A (NICOX LTD ;DEL SOLDATO PIERO (IT)) 13 April 1995 (1995-04-13) the whole document ---	1-8
X	---	9
A	WO 98 25918 A (DROUX SERGE ;JOLY PASCAL (FR); PETIT FRANCIS (FR); GIGLIOTTI GIUSE) 18 June 1998 (1998-06-18) page 1, line 29 -page 3, line 4; claims -----	1-9

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

T/EP 03/08698

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0110814	A	15-02-2001	IT MI991753 A1	05-02-2001
			AT 251109 T	15-10-2003
			AU 6438500 A	05-03-2001
			BR 0012915 A	04-06-2002
			CA 2380116 A1	15-02-2001
			CN 1367773 T	04-09-2002
			DE 60005682 D1	06-11-2003
			DK 1200386 T3	22-12-2003
			WO 0110814 A1	15-02-2001
			EP 1200386 A1	02-05-2002
			HU 0202435 A2	28-11-2002
			JP 2003506425 T	18-02-2003
			NO 20020515 A	01-02-2002
			PL 353092 A1	06-10-2003
			TR 200200290 T2	21-05-2002
JP 5279359	A	26-10-1993	NONE	
WO 9509831	A	13-04-1995	GB 2283238 A	03-05-1995
			IT 1269735 B	15-04-1997
			AT 168986 T	15-08-1998
			AU 678063 B2	15-05-1997
			AU 7809294 A	01-05-1995
			BR 9407749 A	12-02-1997
			CA 2173582 A1	13-04-1995
			DE 69412109 D1	03-09-1998
			DE 69412109 T2	21-01-1999
			DK 722434 T3	16-11-1998
			WO 9509831 A1	13-04-1995
			EP 0722434 A1	24-07-1996
			ES 2120070 T3	16-10-1998
			HK 1004916 A1	11-12-1998
			HU 74446 A2	30-12-1996
			JP 9503214 T	31-03-1997
			RU 2136653 C1	10-09-1999
			SI 722434 T1	31-12-1998
			US 5700947 A	23-12-1997
			US 5780495 A	14-07-1998
			AT 184589 T	15-10-1999
			AU 702662 B2	25-02-1999
			AU 2215695 A	29-11-1995
			BR 9507634 A	23-09-1997
			CA 2190087 A1	16-11-1995
			DE 69512232 D1	21-10-1999
			DE 69512232 T2	24-02-2000
			DK 759899 T3	20-12-1999
			WO 9530641 A1	16-11-1995
			EP 0759899 A1	05-03-1997
			ES 2139199 T3	01-02-2000
			GR 3032078 T3	31-03-2000
			HU 75961 A2	28-05-1997
			JP 9512798 T	22-12-1997
			RU 2145595 C1	20-02-2000
			SI 759899 T1	31-12-1999
			US 5861426 A	19-01-1999
WO 9825918	A	18-06-1998	FR 2757159 A1	19-06-1998
			WO 9825918 A1	18-06-1998